

KSC LAUNCH OPERATIONS DIRECTIVE NO. 20

To: Distribution

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Subject: NON-FLIGHT HARDWARE INSTALLATION/REMOVAL
DOCUMENTATION AND CONTROL

1.1 PURPOSE

The purpose of this directive is to establish responsibilities for the identification, documentation, and control of non-flight hardware installed in the launch vehicle and spacecraft and associated GSE systems or alterations to supporting facilities to preclude the degradation of the integrity of the flight vehicle and to insure the maximum operational safety to personnel. Non-flight hardware is defined as any item installed or altered for the purpose of testing, purging, preserving, facilitating work, or any other use of a temporary nature. (Non-flight hardware does not mean items of equipment that are "non-serviceable" or "defective" by this definition.)

2.1 SCOPE

The provisions of this directive apply to operating elements of the Director, Launch Vehicle Operations and the Director, Spacecraft Operations. It is intended to cover non-flight hardware installed on or in the space vehicle or associated Ground Support Equipment and temporary alterations of the facilities (such as grating removals, etc.).

3.1 INSTRUCTIONS

The Director, Launch Vehicle Operations and the Director, Spacecraft Operations will be responsible for the preparation and publishing of implementing operating instructions for the positive control of non-flight hardware in their respective areas. These procedures shall include instructions to control the installation, removal, operational use, and movement or modification of the installed subject hardware. All temporarily

installed equipment within the launch complex or the space vehicle shall be controlled by the directorate having primary operational responsibility for that equipment.

This system of control shall cover non-flight vehicle hardware, GSE test hardware, temporary installations or removals, and temporary alterations of equipment.

The installation, lifting and/or removal of sectional flooring or grating in operational areas such as the Mobile Launchers, Service Structures, Launch Control Centers (Block-houses), Pad Propellant trenches, etc. will be controlled and will be performed in a manner that is consistent with established safety standards.

The implementing instructions shall include a definition of interface responsibilities with appropriate Launch Operations organizations, Support organizations, and their contractors.

Documents pertinent to the subject matter should be reviewed and revised as required to assure compatibility with this directive.

END OF DIRECTIVE.